



## **Determining an Appropriate Strategy for Reducing Human Migration Based on a Swot Model (Case Study : Ahvaz City)**

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### **Abstract**

Climate change affects all sectors of the economy to some extent, but the agricultural sector may be the most sensitive and vulnerable. This phenomenon can lead to increased migration and heightened conflict risks. Today migration is a challenge for all developing countries. Climate migration and the occurrence of consecutive droughts in the Khuzestan province and the city of Ahvaz are also caused by rising temperatures and lack of precipitation, among other factors. The aim of this research is to assess the capabilities for reducing migration in the city of Ahvaz and develop a migration strategy. In this study the SWOT model was used and questionnaires were adjusted based on the Likert spectrum and completed and analyzed with the opinions of experts. Initially in the first stage, internal factors, namely strengths and weaknesses, were identified, and in the next stage, external factors, namely opportunities and threats, were identified and weighted. Among the external factors, threats with a weight of 0.46 and among the internal factors, weaknesses with a weight of 0.44 had the highest weights assigned to them. The results showed that the strategic migration strategy for the city of Ahvaz is close to a minimum-minimum or defensive strategy. The main message of this article emphasizes the use of defensive and reduction strategies. This means that in this area weaknesses should be reduced and threats should be avoided. These weaknesses and threats are the basis for migration and hinder the sustainable development of Ahvaz.

**Key words:** Strategic, Migration, Swot Model, Ahvaz, Defensiv.



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## Extended Abstract

### Introduction

Global warming is expected to lead to an increase in phenomena such as storms, floods, hail, droughts, heatwaves, and unseasonable cold spells. These processes disrupt livelihoods and alter motivations for leaving specific locations. Climate change affects all economic sectors to some extent; however, the agricultural sector may be the most sensitive and vulnerable. Today, migration is a significant issue for all developing countries, and Iran, particularly Khuzestan Province, is no exception. Climate-induced migration (both permanent and seasonal) and the recurring meteorological droughts in Khuzestan and Ahvaz are primarily due to rising temperatures and insufficient rainfall, largely resulting from hydrological droughts and subsequently agricultural droughts. This research aims to investigate the causes of migration among the people of Ahvaz and to develop strategies to address this issue. The emergence of economic, social, and environmental problems affecting citizens in Ahvaz has created a context for migration, negatively impacting the sustainable development of the city.

### Data and Methodology

This study employed both field and library methods to gather necessary statistics and information. Library sources included organizations, municipalities, statistical yearbooks, official data from government offices, and internet resources. Field studies were conducted through direct observation and questionnaires to collect the required data. According to the 2016 census, Ahvaz has a population of 1,184,788. The statistical population of the study is the city of Ahvaz, with a sample size of 384 individuals. The reliability of the questionnaire was assessed using Cronbach's alpha method. For the fieldwork, a closed questionnaire was utilized in the form of a five-point Likert scale (very high, high, moderate, low, very low). The validity of the questionnaire was reviewed and confirmed by experts and scholars. To determine the reliability of the questionnaire, 45 preliminary questionnaires were distributed in various areas of Ahvaz, and the data obtained from the questionnaires were analyzed using SPSS software. The SWOT strategic model was employed to analyze the internal factors (strengths and weaknesses of migration) and external factors (opportunities and threats) affecting migration in Ahvaz.

### Results and Discussion

Today, migration is a significant challenge for all developing countries, including Iran and Khuzestan Province. Climate-induced migration (both permanent and seasonal) and the recurring meteorological droughts in Khuzestan and Ahvaz are primarily due to rising temperatures and insufficient rainfall, largely resulting from hydrological droughts and subsequently agricultural droughts. This research aims to investigate the causes of migration among the people of Ahvaz and to develop strategies to address this issue. The emergence of economic, social, and environmental problems affecting citizens in Ahvaz has created a context for migration, negatively impacting the sustainable development of the city.

### Conclusion

The analysis of the criteria and weighted scores for the causes of migration revealed that among internal factors, issues related to dust storms scored 0.44 as a significant strength, while climate change scored 0.396 as a notable weakness. Among external factors, attracting investment from



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within and outside the province scored 0.396 as the most important opportunity, while water and soil pollution in Ahvaz scored 0.460 as the most significant threat to migration in the city. Additionally, the results of the migration cause assessment matrix using the SWOT model indicated that to combat migration from this city, a defensive strategy or a minimum-minimum strategy (WT) should be employed. The defensive strategy is essentially aimed at reducing weaknesses and avoiding threats.

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